

ABSTRACT

A thrust control valve includes a nozzle having a gas supply chamber, a gas jetting chamber and a connecting passage therebetween. The nozzle has an upstream inner surface defining the gas supply chamber and a downstream inner surface defining the gas jetting chamber. The valve also includes a plug axially movably inserted into the gas supply chamber, the connecting passage and the gas jetting chamber. The plug has an upstream outer surface facing the upstream inner surface to define an upstream passage and a downstream outer surface facing the downstream inner surface to define a downstream passage. The plug can control thrust by simultaneously changing sectional areas of the upstream and downstream passages by an axial movement of the plug.